

CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

STAFF PROFILE

PERSONAL INFORMATION

1. Name : R. SOUNDARIA

2. Date of Birth : 05.02.1987

3. Address :

Residential	Office
NO 651, 6 th CROSS, SHANMUGA NAGAR, U.K.T. MALAI, VAYALLOOR ROAD, TRICHY-620102	CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS), ANNAMALAI NAGAR, TRICHY-620018

ACADEMIC INFORMATION

4. Designation & Department: Assistant professor,
PG and Research Department of Mathematics

5. Educational Qualification:

Degree	Year	College/University
Ph.D	2020	Pursuing, Bharathidasan University,
SET	2017	Mother Teresa Women's University
M.Phil	2017	Bishop Heber College, Trichy
M.Sc.,	2009	PSG College of Technology, Coimbatore
B.Sc.,	2007	Pioneer College of Arts and Science , Coimbatore

6. Researcher ID :

GOOGLE SCHOLAR: 3SxIBOUAAAAJ

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WEB OF SCIENCE: <https://publons.com/researcher/ABX-6247-2022/>

PUBLONS: <https://publons.com/researcher/3706605/soundaria-r/>

SCOPUS : <https://id.elsevier.com/settings/redirect?code=I4amNgH4ATWAdAQXnni9hT6-alDyzznCcdIo2IXk>

VIDWAN: <https://vidwan.inflibnet.ac.in/profile/205834>

7. Experience :

Date of Joining	Institution	Year of Experience
18.06.2018 to till date	Cauvery college for Women, Trichy	6 year 9 months
27.06.2011 to 08.04.2014	Trichy Engineering College, Trichy	2 years 9 months
18.06.2009 to 30.10.2010	PSG College of Arts and Science, Coimbatore	1 year 4 months

8. Areas of Specialization : Fuzzy Inventory Models with Machine Learning**9. Languages known** : English, Tamil.**10. Subjects Taught :**

UG	Numerical Methods with MATLAB Programming, Analytical Geometry 3D, Graph Theory, Algebra and Calculus, Biostatistics, Operations Research, Fuzzy Sets and Systems, Mathematics – III, R Language, Numerical Analysis and Statistics
PG	Advanced Numerical analysis, Ordinary Differential Equations, Mathematical Foundation For computer Science

11. Details of Publications:

Journal Name & Volume	Year of Publication	ISSN Number	Name of the Paper	Impact Factor
Thermal Science, Volume 25, Special Issue (Scopus)	December 2021	2334 – 7163	Optimization of the Average Monthly Cost of an EOQ Inventory Model for Deteriorating Items in Machine Learning Using Python	1.655
Sigma Mathematics (Scopus) & 12	March 2024	2227 – 7390	Optimizing The Economic Order Quantity Model Using Fuzzy Set Theory and Machine Learning Applied to a Pharmaceutical Framework	2.3
Fuzzy Systems and Soft Computing & 19 (UGC Care List – I)	July – December 2024	1819 - 4362	Enhancing Fuzzy EOQ Judicial Framework using Machine Learning with Weka	1.3

Communications on Applied Nonlinear Analysis (Scopus) & 32	October 2024	1074 – 133X	Optimization of Fuzzy Economic Order Quantity using Machine Learning and Weka	0.18
Axioms (Scopus) & 13	October 2024	2075 - 1680	A Hybrid Fuzzy Mathematical Programming Approach for Manufacturing Inventory Models with Partial Trade Credit Policy and Reliability	1.9
Advances in Nonlinear Variational Inequalities & 28	1092 – 910X	February 2024	Revealing Advanced Inventory Management Approaches through Python-Based Visualization and Modelling of Neutrosophic and Fuzzy Mathematical Models for Enhanced Decision-Making and Optimization	1.3

12. Details of Papers Presented:

Date	Organizer	Name of the Seminar	Paper Name
17 th March 2017	Bishop Heber College, Trichy	Heber conference on Computational Techniques	Modified third order RK Method based on Centroidal mean for Fuzzy and hybrid fuzzy initial value problems
2 & 3 th March 2018	Bishop Heber College, Trichy	Recent trend in Applied Mathematics	Fifth order Runge-Kutta Method based on Heronian Mean for Hybrid Fuzzy Initial Value Problem
7 & 8 th Jan 2019	Bishop Heber College, Trichy	HICAAMMC-2019	Fifth order Runge-Kutta Method based on Contra Harmonic Mean for Hybrid Fuzzy Initial Value Problem

4 th March 2020	Kongunadu College of Engineering & Namakkal	National Conference on Mathematics: Pure, applied and Computation (NMPAC-2020)	Solving Fuzzy Linear Fractional Programming Problem Using LU Decomposition Method
4 th March 2020	Kongunadu College of Engineering & Namakkal	National Conference on Mathematics: Pure, applied and Computation (NMPAC-2020)	Solving Trapezoidal Fuzzy Number By Using Fully Fuzzy Linear Equations By Gauss Jacobi and Seidal Method
8 th November 2020	Queens College of Arts and Science, Pudukottai	National Conference on Mathematics: Pure, applied and Mathematics	Optimization of Average Monthly cost for Deteriorating items
15 th – 16 th July 2021	Mohanlal Sukhadia University, Udaipur	Recent Applications of Mathematical Sciences	Optimization of Average Monthly cost for Deteriorating items using Machine Learning by Python
24 th – 25 th February 2022	Cauvery college for women (Autonomous)	International Conference on New Ideas in Technology and Innovations	Optimization of fuzzy economic order quantity using partial trade reliability
30 th to 31 st January 2023	Cauvery college for women (Autonomous)	International Conference on New Ideas in Technology and Innovations	Optimization of fuzzy production inventory model with partial trade credit policy and reliability using Python
21 st to 22 nd October 2023	Holy cross Arts and Science for Women	International Conference on Mathematical Modelling, Analysis and Computing – 2023	Optimization of fuzzy production inventory model with partial trade credit policy and reliability

13 th to 14 th February 2024	Cauvery college for women (Autonomous)	International Conference on New Ideas in Technology and Innovations	Optimization of fuzzy inventory models with machine learning by naive bayes classification and weka
18 th to 19 th February 2024	Bon Secours Arts & Science College For Women	Virtual Conference on Emerging Trends For Futuristic Development in Science and Technology (TECHTRENZ 2K24)	Analyzing Economic Order Quantity using Machine Learning and Weka
23 th February 2024	AIMAN College of Arts and Science For Women ,Trichy	International Conference on Recent Trends in Mathematics and its Applications-2024	Optimization of Fuzzy Economic Order Quantity using Machine Learning and Weka
06 th March 2024	Idhaya College for Women, Kumbakonam	International Conference on Recent Trends in Mathematics ICRMT 2024	Presented Paper “Optimization of Fuzzy Economic Order Quantity with Machine Learning Via Random forest and Weka”, Recent Trend in Mathematics
24 th January 2025	Seethalakshmi Ramaswami College (Autonomous), Trichy	International Virtual Conference on “Mathematical Explorations and Breakthroughs”	Participated
18.02.2025 – 19.02.2025	Cauvery college for women (Autonomous)	International Conference on New ideas in Technology and innovations, Cauvery college for women (Autonomous), Annamalai Nagar, Trichy - 18	Presented Paper “Optimization of Fuzzy Pharmaceutical Economic Order Quantity using Machine Learning via

			Navie Bayes Classification”
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13. Details of Seminars / Conferences / Workshops Attended:

Year & Date	Organizer	Title	National / International	Topic
24 th August 2019	Kongunadu College of Engineering and Technology, Namakkal	CSIR sponsored work shop “Innovations in Number Theory for Cryptography Applications”	CSIR sponsored workshop	Innovations in Number Theory for Cryptography Applications
11 th October 2019	AIMAN College of Arts and Science, Trichy	Fuzzy Mathematics	Faculty development Programme	Fuzzy Mathematics
17 th to 19 th March 2022	National Institute of Technology, Trichy	Training for Trainees of 21 st Century Skills Education	Rajiv Gandhi National Institute of Youth Development	Personality Development, Interpersonal Skills, Creativity, Flipped Classroom and Blended Classroom
9 th and 10 th June 2022	IQAC, Cauvery College for Women (Autonomous), Trichy	Fostering Global Competence among Higher Education Institutions through Technology	Faculty development Programme	Fostering Global Competence among Higher Education Institutions through Technology
20 th to 25 th June 2022	Mahatma Gandhi National Council for Rural Education, UGC – HRDC	Mentoring Skills and Facilitation Skills for Rural Higher Education Institutions	Faculty development Programme	Mentoring Skills and Facilitation Skills for Rural Higher

	Bharathidasan University, Trichy			Education Institutions
6 th and 7 th January 2023	Jamal Mohammed College (Autonomous), Trichy	Differential Equations and their Applications in Mathematical Modelling	Workshop	Differential Equations and their Applications in Mathematical Modelling
17 th September 2022	Rajeev Gandhi College of Management Studies, Maharashtra	Academic Integrity and Dealing with plagiarism – A practical Approach	Faculty development Programme	Academic Integrity and Dealing with plagiarism – A practical Approach
06.01.2023 – 07.01.2023	Jamal Mohammed College, Trichy	Lecture Workshop on Differential Equations and their Applications in Mathematical Modeling	National	Lecture Workshop on Differential Equations and their Applications in Mathematical Modeling
11.09.2023 - 15.09.2023	Vellore Institute of Technology, Chennai	A Five-Day Online FDP on Advances in Graph Theory	National	A Five-Day Online FDP on Advances in Graph Theory

14. Details of Orientation / Refresher Course Attended:

Date	Title of the Course	Organizer
29.10.2018 to 2.11.2018	Capacity Building Workshop on E-Content Development	Cauvery college for Women (Autonomous)
August to October 2019	Higher Engineering Mathematics-FDP	NPTEL
August to October 2019	Introduction to R Software	NPTEL
August to October 2019	Mentor for Calculus of one variable	NPTEL
August to October 2020	Descriptive Statistics with R software	NPTEL

August to October 2020	Mentor for Descriptive Statistics with R software	NPTEL
January to February 2021	Python for Data Science	NPTEL
January to April 2021	Essential of Data Science with R-Software 1 Probability and Statistical Inference	NPTEL
August to October 2021	Big Data Computing	NPTEL
August to October 2022	Introduction to Machine Learning (Tamil)	NPTEL
January to April 2023	Data Analytics with Python	NPTEL
August to October 2023	Essential Mathematics for Machine Learning	NPTEL
10.03.2023 – 16.03.2023	UGC-Sponsored Online short term course in Quality Assurance and Enhancement in Higher Education	Bharathidasan University Khajamalai Campus Tiruchirappalli

15. Details of Incharge / Participation in Extracurricular Activities :

(NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):

Nature of Activity	Period of Incharge
Culturals	2018-2023

16. Details of Participation in Consultancy, Training, Development etc.:

1) Getting with one note

2) Digital story telling with Microsoft sway

17. Any other information if any:

Number of Webinars Attended **22**

Number of Faculty Development Programme Attended **22**